

REMARKS

Claims 1-3, 5, 8 and 10-15 are pending.

Claims 1 and 3 are independent claims.

Interview

The courtesy of the Examiner in extending an interview on November 9, 2005 is greatly appreciated. The interview summary record, an unofficial copy of which was handed to the undersigned correctly summarizes the interview

Additionally, as understood it was the Examiner's position that the structure of the lens inherently related to the focal length. The Examiner stated that this would be understood by one skilled in the art but on request by the undersigned the Examiner stated he would make of written record, evidence to support his position.

Foreign Priority

The indication of the foreign priority documents have been received and placed in the file is noted.

Drawings

The indication that the drawings filed on January 19, 2001 were accepted is noted.

Reply to Objections

The title was objected to. A new title has been provided. The Examiner is requested to withdraw the objection to the title.

Additionally, a minor amendment has been made to the abstract to place it in better form for U.S. practice. The Examiner is requested to approve the new abstract.

Claim Objections

✓ The Examiner objected ^{to} ~~two~~ claims 1-3 as set forth in sections 3-5 of the Office Action on page 2. The claims have been amended to place them in better form.

The Examiner is requested to reconsider and withdraw the objections to the claims.

Reply to Rejections Based on Art

Claims 1-3, 5 and 8 were rejected under 35 U.S.C. 103 (a) being unpatentable over Komiya et al (U.S. 6,211,911 B1), in view of Sekine (U.S. Patent 4,602,289). This rejection is traversed.

In explaining the features in Komiya et al., the Examiner states on page 3, last sentence "The focal length of a lens is determined by the index of refraction, the radii of curvature of the lens' surfaces, and the medium in which the lens resides; hence, the "focal length corresponds to the structure of lenses." This interpretation is traversed. Focal length is a "distance between the optical center of the lens and the television camera screen or photographic camera film when the camera is focused on a distant object"¹. Also, the index of refraction is "the ratio of the velocity of a wave in a vacuum to that in a specified medium." This is also contained in the dictionary noted below. If the Examiner is to again assert that the focal length relates to the "structure of the lens," competent evidence must be provided.

¹ Electronics Dictionary, 4th Edition 01978, McGraw-Hill Book Company, pp. 253 and 313 (attached)

Accordingly, what is clearly missing from the base reference is what is set forth in the last paragraph of claim 1. With respect to the secondary reference to Sekine, this reference does not cure the innate deficiencies of the rejection based on the first reference. That is, there is no *prima facie* case of obviousness because the structure claimed is not shown or suggested by the combination of references.

It appears what has been done, is that the Office Action has focused on the substitution in differences instead of on the invention as a whole. See *Hybritech Inc. v. Monoclonal Antibodies, Inc.* 231 U.S.P.Q. 81 (Fed. Cir. 1986), wherein the court stated as follows:

Focusing on the obviousness of substitutions in differences instead of on the invention as a whole...was illegally improper way to simplify that difficult determination of obviousness.

Also, even if the references show the structure that has been claimed, which they do not, a consideration of the improved result must be taken into consideration when jumping to a conclusion of obviousness. One of the results of the structure is set forth on page 2 of the specification, lines 11-14, which states as follows:

An object of the present invention is to so arrange it that the characteristics of a honey-comb type solid-state electronic image sensor can be taken into consideration when image data is reproduced.

Results must be consider in arriving at a conclusion of obviousness (See *The Gillette Co. v. S. C. Johnson and Son, Inc.* 16 U.S.P.Q. 2d 1923 (Fed. Cir. 1990), wherein the court stated as follows:

An analysis of obviousness of a claimed combination must include consideration of the results achieved by that combination. As we explained in *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). [cited in the MPEP]

For the reasons set forth above, the Examiner requested to reconsider and withdraw the rejections of the claims under 35 U.S.C. 103.

New Claims

New claims 10-15 have been added. The features of these claims are supported in the specification on page 4, lines 15-26.

These claims are considered patentable at least for the same reasons as their base or intervening claims. Furthermore, these claims contain features not shown or suggested by the art applied.

Additional Art Cited

Additional art was commented on in section 11 of the Office Action. This art has not been applied and no comments are considered necessary.

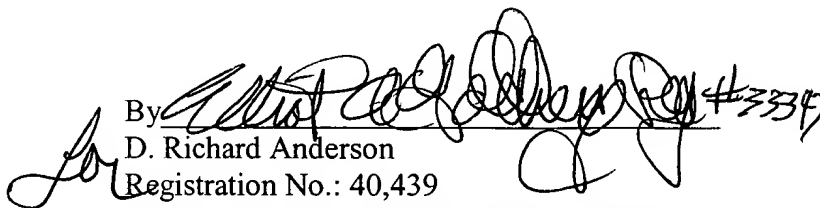
CONCLUSION

Should the Examiner wish to discuss any of the issues arising in the present application or wish to receive Applicant's further explanation, the Examiner is invited to contact Elliot A. Goldberg (Reg. No. 33,347) at (703) 205-8000 in Northern Virginia to discuss this application and any of the issues contained therein.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: November 21, 2005

Respectfully submitted,

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Attachment: Dictionary Excerpt

- impurity semiconductor** A semiconductor whose properties are caused by impurity levels produced by foreign atoms.
- in** Abbreviation for *inch*.
- InAs** Symbol for *indium arsenide*.
- in-band signaling** The transmission of signaling tones within the channel normally used for voice transmission.
- incandescence** Emission of visible radiation by a heated object, such as a lamp filament heated by electric current.
- incandescent lamp** An electric lamp in which light is produced by sending electric current through a filament of resistance material to heat it to incandescence.
- inch** [abbreviated in] A unit of length, equal to 2.54 cm. Use of the SI unit of length, the meter, is preferred.
- inch per second** [abbreviated in/s] A magnetic tape speed rating. Commonly used speed values include 1 $\frac{1}{2}$, 3 $\frac{3}{4}$, 7 $\frac{1}{2}$, 15, and 30 in/s (4.76, 9.5, 19, 38, and 76 cm/s).
- inching** *jogging*.
- incidence angle** The angle between an approaching beam of radiation and the perpendicular (normal) to the surface that is in the path of the beam.
- incidental amplitude modulation** Amplitude modulation that results unintentionally from the process of frequency modulation and/or phase modulation.
- incidental frequency modulation** Frequency modulation that results unintentionally from the process of amplitude modulation.
- incidental phase modulation** Phase modulation that results unintentionally from the process of amplitude modulation.
- incidental radiation device** A device that radiates radio-frequency energy during normal operation, although not intentionally designed to generate such energy.
- incident light** The direct light that falls on a surface.
- incident wave** 1. A wave that impinges on a discontinuity or on a medium that has different propagation characteristics. 2. A current or voltage wave that is traveling through a transmission line in the direction from source to load.
- inclination** The angle that a line, surface, vector, or aircraft makes with the horizontal.
- inclined synchronous orbit** A nonequatorial, hence nonstationary, synchronous and circular orbit.
- inclinometer** 1. An instrument that measures the direction of the earth's magnetic force with relation to the plane of the horizon. 2. An instrument that measures the attitude of an aircraft with respect to the horizontal.
- incoherent scattering** Scattering of particles or photons, in which the scattering elements act independently of one another, so that there are no definite phase relationships among the different parts of the scattered beam.
- incoherent waves** Waves that have no fixed phase relationship.
- incoreductor** A variable inductance that has a saturable core, used in some high-frequency circuits.
- increment** A small change in the value of a variable.
- incremental digital recorder** A magnetic-tape recorder in which the tape advances across the recording head step by step, as in a punched-paper-tape recorder. Used for recording an irregular flow of data economically and reliably.
- incremental frequency shift** A method of superimposing incremental intelligence on another intelligence by shifting the center frequency of an oscillator a predetermined amount.
- incremental permeability** The ratio of a small cyclic change in magnetic induction to the corresponding cyclic change in magnetizing force when the average magnetic induction is greater than zero.
- Incremental printer** A printer that prints sequentially, character by character, on each line. An example is a computer-controlled electric typewriter.
- incremental sensitivity** The smallest change in a quantity being measured that can be detected by a particular instrument.
- Incremental tuner** A television tuner in which the antenna, RF amplifier, and RF oscillator tuning coils are continuous or in small sections connected in series. Rotary switches make connections to the required portions of the total inductance necessary for a given channel, or short-circuit all of an inductance except that required for a given channel.
- independent-particle model** A nuclear model in which each proton and neutron moves independently in the field corresponding to the average positions of the other protons and neutrons. Also called individual-particle model, nuclear model, shell model, and single-particle model.
- independent-sideband modulation** Modulation in which the upper and lower sidebands carry entirely different information signals. The carrier may be either transmitted or suppressed.
- independent variable** The independent quantity or condition that, through the action of the control system of an automatic controller, directs the change in the controlled variable according to a predetermined relationship.
- indexing** The process of establishing memory addresses in a computer by adding the value in an address field of an instruction to a value stored in a specified index register.
- index of refraction** The ratio of the velocity of a wave in a vacuum to that in a specified medium.
- index register** A computer register whose contents are used to automatically modify addresses incorporated in instructions just prior to their execution.

forbidden band

foamed plastic A resinous material that has been expanded into a multicellular structure which has low density and relatively high strength.

focal length The distance between the optical center of a lens and the television camera screen or photographic camera film when the camera is focused on a distant object.

focal spot The small area on the target of an x-ray tube that gives off x-rays when hit by the electron stream.

focus 1. The point at which rays of light or electrons of a beam converge to form a minimum-diameter spot. 2. To move a lens or adjust a voltage or current to obtain a focus.

focus control A control that adjusts spot size at the screen of a cathode-ray tube, to give the sharpest possible image. It may vary the current through a focusing coil or change the position of a permanent magnet.

focus-defocus mode A mode of storage of binary digits in which the writing beam of a cathode-ray storage tube is initially focused. For one type of binary digit it remains focused, and for the other type it is suddenly defocused to a small concentric circular area, in the time interval before the beam is cut off and moved to the next position.

focusing 1. The process of controlling convergence or divergence of the electron paths within one or more beams to obtain a desired image or current density distribution in the beam. 2. The process of moving an optical lens toward or away from a screen or film to obtain the sharpest possible image of a desired object.

focusing anode An anode used in a cathode-ray tube to change the size of the electron beam at the screen. Varying the voltage on this anode alters the paths of electrons in the beam and thus changes the position at which they cross or focus.

focusing coil A coil that produces a magnetic field parallel to an electron beam, for the purpose of focusing the beam. The coil is usually mounted on the neck of a cathode-ray picture tube, and carries a direct current whose value can be adjusted by a focus control rheostat.

focusing electrode An electrode to which a potential is applied to control the cross-sectional area of the electron beam in a cathode-ray tube.

focusing grid A focusing electrode.

focusing magnet A permanent magnet used to produce a magnetic field for focusing an electron beam.

focus rectifier A special electron tube or selenium-rectifier stage used in some color receivers to provide a separate voltage source for the color television cathode-ray tube.

fog chamber *Cloud chamber.*

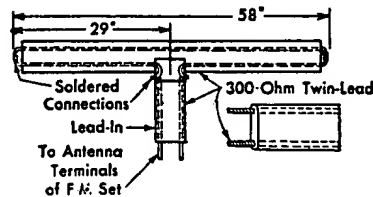
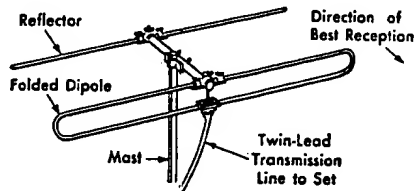
fog track A line of condensation, produced in supersaturated water vapor by the passage of charged particles. Used in studying the courses and collisions of particles in cloud chambers.

foil A flexible sheet of thin aluminum, lead, or

tin, widely used in fixed capacitors.

folded cavity A cavity used in some klystrons to make the incoming wave act on the electron stream from the cathode at several places to produce a cumulative effect.

folded-dipole antenna A dipole antenna whose outer ends are folded back and joined together at



Folded-dipole antenna with reflector mounted on mast for television reception, and folded-dipole antenna made from twin-line for FM reception. Multiply dimensions by 2.54 to convert to centimeters.

the center. The impedance is about 300 Ω , as compared to 70 Ω for a single-wire dipole. Widely used with television and FM receivers.

folded horn An acoustic horn in which the path from throat to mouth is folded or curled to give the longest possible path in a given volume.

foldover Picture distortion seen as a white line on either side, top, or bottom of a television picture. Generally caused by nonlinear operation in either the horizontal or vertical deflection circuits of a receiver.

font A family of characters, such as those provided by a computer output printer, a computer output display, or a typewriter.

foot [abbreviated ft] A unit of length, equal to 0.3048 m. Use of the SI unit of length, the meter, is preferred.

footcandle [abbreviated fc] A former unit of illumination, replaced by the lumen per square foot. Use of the SI unit of illumination, the lux, is preferred.

footlambert [abbreviated fL] A unit of luminance. Use of the SI unit of luminance, the candela per square meter, is preferred.

foot per second [abbreviated ft/s] A unit used in specifying the speed at which sound waves travel through a medium. In air at standard sea-level conditions, the speed of sound is about 1080 ft/s (330 m/s), and 4800 ft/s (1460 m/s) in water.

forbidden band An energy band in which there

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U.S. App. 09/764,062